

**ABSTRACT OF THE DISCLOSURE**

A method and system for dispersion compensation comprises a dispersion compensator (DC) for receiving a train of chromatically dispersed light pulses over a transmission fiber at multiple operational bandwidths and inducing on the  
5 train a compensatory dispersion having an adjustable broadband dispersion slope. In one approach, broadband dispersion slope is tuned using a pair of dispersion compensation blocks (DCBs) and mode hopping. In another approach, broadband dispersion slope is tuned using paired DCBs and symmetric intra-channel slope adjustment with mode mismatch. The DCBs are etalon-based.  
10 Slope tuning is induced by etalon tuning performed, by way of example, thermally or using microactuators.